

Keynote Address

by

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Thank you, Commissioner Christie, for that warm introduction, and good morning, ladies and gentlemen. Your organization has important functions and responsibilities, and I expect its activities will become even more important in the next several years. It is appropriate, then, for you as a group to be looking ahead and thinking about how the region's electricity needs and concerns can best be met. I welcome the opportunity to express my views on this subject and to support what I hope will be a fruitful long-term dialogue between OPSI and DOE.

Before going further I want to give you a brief status report on where we are concerning the possible designation of National Interest Electric Transmission Corridors, or National Corridors, to use our shorthand term. As most of you know, the Department published two draft National Corridors for public comment last spring. One of these Corridors would affect a large portion of the PJM area. The comment period closed July 6, and we received more than 2000 comments, many of them thoughtfully written and *forcefully* argued. DOE staff have considered the comments carefully, and are preparing recommendations for the Secretary's review concerning possible designation of one or more National Corridors. Because this matter is still under consideration, I am not able to discuss it further with you today.

That limitation, however, will not prevent us from discussing other important aspects of the electricity industry in the area covered by PJM. As you know, one of my office's major assignments is to facilitate the modernization of the Nation's electricity delivery systems. For my team, this assignment goes far beyond a concern about the development of new transmission and distribution facilities. We are acutely aware, for example, that how much new transmission capacity a region needs, and where it needs it, are the net results of many other factors – such as the rate of demand growth, the scale and effectiveness of energy efficiency programs, the pace and location of renewable and other generation development, the pace and location of retirements of existing generation facilities, and so forth.

In short, we, like you, are interested in how we can help shape the evolution of the overall delivery infrastructure to best serve the nation. The transmission network is of course vital, not for its own sake, but because it enables the region to use its available generation capacity to best advantage at all times, in the face of ongoing changes in fuel prices, economic conditions, weather patterns, federal and state policy objectives, and unplanned outages of key generation and transmission facilities.

Further, the electricity industry itself has entered a period of major rapid and evolutionary change, and many of you are tasked with providing policy guidance to facilitate that transition.

In such turbulent times, it is important for all of us with energy policy responsibilities to talk with each other early and often, to share ideas, see where we have common ground, and find ways to either reconcile our differences or work around them if necessary. In my view, one of OPSI's most important functions is to provide a forum for such discussions.

Roles for OPSI and PJM

Many of the states represented here today have either already prepared a long-term energy plan or are in the process of doing so. For example, last week Governor Kaine issued a Virginia Energy Plan. I commend the states highly for these efforts.

Such plans will undoubtedly need periodic updating and mid-course corrections, but in my view they are essential tools for states seeking to steer their way through today's uncertainties and achieve their most basic energy policy objectives.

Development of state-level energy plans, however, is only one step in a longer and larger process. In most parts of the country, wholesale electricity markets have become regional in scale.

Although I expect distributed generation to become more important than it is today, I think today's pattern of siting much generation distant from load – and often in another state – will continue for many years to come.

In turn, this means that state-level planning needs to be followed with *regional-scale* planning and coordination. After sharpening their thinking about their future electricity objectives, strengths, and needs, states need to discuss with their neighbors some basic questions concerning the mix and locations of the region's generation and transmission resources.

Clearly, a given region will have only *one* electricity delivery infrastructure. We will all benefit if the states in the region are in some agreement about what its basic features should be and are able to work in a coordinated way to bring that shared view to reality.

OPSI can play a crucial role in this evolutionary process, by identifying key issues, hosting PJM-wide discussions of issues, or by facilitating discussions as needed among smaller groups of states, and in general serving as a regional coordinator and information clearinghouse. PJM can also be of great assistance in this process, as a source of critically important information and analysis.

Some may question whether activities of this kind, whether by OPSI or by PJM, are appropriate. I do not. To me the need is clear and urgent, and frankly, there aren't very many organizational entities that can adequately address these are important regional electricity questions.

How OE Can Help OPSI and Its Members

My office can assist OPSI and its member states in dealing with these challenges in several ways. The office provides technical assistance to state commissions, governors' offices and legislatures (on an as-requested basis) on matters related to the development of state electricity policies and the coordination of such policies at the regional level. These efforts have included design of renewable portfolio standards, energy efficiency programs, enhanced demand response, development of a

regional transmission siting protocol, regional planning support, etc. The talents and experience of some of the Nation's leading experts on these subjects are accessible to you through my office, DOE's national laboratories, and other organizations we work with.

Some of your commissions are already familiar with our work in these areas through existing projects. For example, we have been pleased to support the work of the Mid-Atlantic Distributed Resources Initiative (MADRI). Like OPSI itself, MADRI is a great example of how states can work together to better inform their individual actions, and also coordinate as needed at the regional level. You should be proud that Midwest and Pacific Northwest state commissioners have asked us to help them to develop a MADRI-type process in their regions.

We are also pleased to have served, jointly with EPA, as the facilitators for the National Action Plan for Energy Efficiency. The Action Plan, as you may have heard, was produced by a group of leading electric and gas utilities, state commissioners and other state officials, and their respective national associations, as a call for electric and gas utilities and related organizations to deliver more energy efficiency services to ratepayers.

Last week Energy Secretary Bodman announced that DOE, including my office, is providing support for the National Governors Association's new Clean Energy Task Force, which will promote advanced electricity generation and improved efficiency.

In another subject area, my office works with states, the electricity industry, and electricity-related organizations to make the Nation's electricity infrastructure more resistant to natural disasters and physical or cyber assaults. Our expertise in this area is also available to OPSI and its members if you have questions or concerns on these subjects.

On the more technical side, as many of you know, my office manages the federal government's principal research program on transmission and distribution technologies and other grid-related problems. We are eager to work closely with states and utilities to facilitate appropriate applications of new technology in grid modernization efforts.

We have research under way in four major areas:

- *High-temperature superconductivity.* We are developing wire that can be used for superconducting transmission cables and other applications. We think that for the long term this work has great promise.
- *Visualization and Controls.* These are devices that improve grid operator's response times to problems and enable the development of switchable, smart, and secure networks.
- *Energy Storage and Power Electronics.* The capability to store electricity or energy economically in large quantities has long been a key goal for this industry, and progress in this area is now more important than ever. Advanced storage designs and materials will enable grid planners and operators to integrate larger fractions of intermittent renewable generation into a region's generation mix.

- *Distributed Systems Integration.* We are closing out our generation research programs in microturbines and internal combustion engines, because these technologies are now commercially proven. At the same time, we are giving additional attention to the challenges of integrating these and renewable technologies smoothly into existing distribution systems and the transmission grid.

Thank you for the opportunity to speak with you today. I look forward to your questions and comments.